

REMARKS

The Office Action mailed October 18, 2002 has been reviewed and the comments of the Patent and Trademark Office have been considered. Claims 1-9 were pending in the application. Claim 1 has been amended, claim 2 has been canceled and new claims 10 and 11 have been added. Therefore, claims 1 and 3-11 are pending in the application and are submitted for reconsideration.

In the Office Action, claims 1, 4-6, 8, and 9 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 4,210,899 to Swonger et al. (hereafter "Swonger"). Claim 2 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Swonger in view of U.S. Patent 4,817,183 to Sparrow (hereafter "Sparrow"). Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Swonger in view of U.S. Patent 4,186,378 to Moulton (hereafter "Moulton"). Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Swonger in view of U.S. Patent 6,185,318 to Jain et al. (hereafter "Jain"). Applicants respectfully traverse these rejections for at least the following reasons.

As recited in amended independent claim 1 and newly added independent claim 10, the claimed invention recites a device (or method) configured so that in the process of detecting or identifying an input fingerprint, the input fingerprint is only recorded in the user recording unit when the comparison unit determines that the input fingerprint does not match any of the reference fingerprints stored in advance in the database. That is, the claimed invention recites that only input fingerprints that do not match one of the reference fingerprints stored in the database are recorded by the user recording unit. This recited feature is not taught or suggested by the applied prior art and this recited feature also provides several advantages that are discussed in the specification.

Specifically, with respect to the originally filed claim 2, the Office Action acknowledges that Swonger does not disclose this feature. The Office Action then erroneously relies on Sparrow to cure this deficiency. However, Sparrow only discloses an improved technique of recording fingerprints in a database in advance. That is, Sparrow teaches a system for recording a more complete topological description of a fingerprint so that the fingerprint needs to be recorded only once as pointed out in col. 1, line 68 that is cited in the Office Action.

Therefore, Sparrow differs from the claimed features in claims 1 and 10 in at least the following respects. *First*, the cited portion of Sparrow relates to the process of recording fingerprints in a database and at best corresponds to the claimed recording of fingerprints in advance in a database since it provides a system for recording a complete topology of the fingerprint. *Second*, Sparrow actually teaches away from the claimed invention since it teaches recording the fingerprints only once when storing the fingerprints in advance in sharp contrast to the claimed user recording unit that records fingerprints only during the detecting process. Furthermore, the claimed user recording unit also is configured differently since it only records an input fingerprint if the input fingerprint does not match a reference fingerprint stored in advance in the database of fingerprints.

Furthermore, the claimed features provide several advantages as discussed in the specification. (1) The claimed device has a processing unit to process the data received from the fingerprint reader unit, and send the processed data to the comparison unit. (2) The claimed device is provided with a temporary memory recording unit to temporarily store the fingerprint data from the fingerprint reader or the processing unit (as recited in new claim 11). (3) If the fingerprint data does not match the reference data, the fingerprint data in the temporary memory recording unit is permanently stored in the user recording unit. This provides the advantage that any malfunctioning of the fingerprint identification device or unauthorized access attempts through the fingerprint identification device can be conveniently investigated while minimizing the memory capacity required for the user recording unit. See, for example, pages 4-5 of the specification.

Accordingly, neither the structure (or particular steps) nor the advantages of the claimed invention is disclosed or suggested by the applied prior art. Accordingly, independent claims 1 and 10 are believed to be patentable over the applied prior art.

The dependent claims are also in condition for allowance for at least the same reasons, as discussed above, as the independent claims on which they ultimately depend. In addition, they recite additional patentable features when considered as a whole.

In view of the foregoing amendments and remarks, applicants respectfully submit that the application is in condition for allowance. If there are any questions regarding the application, or if an examiner's amendment would facilitate the allowance of one or more of the claims, the examiner is invited to contact the undersigned attorney at the local telephone number below.

A petition with fee for a three month extension of time are enclosed.

Respectfully submitted,

April 18, 2003

Date

Customer Number: 22428



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Attached: Attachment A

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge deposit account No. 19-0741 for any such fees; and applicants hereby petition for any needed extension of time.

ATTACHMENT A

Marked up version of claim amendments made in the Amendment filed

April 18, 2003

1. (Amended) A fingerprint identification device to identify fingerprints, comprising:
 - a fingerprint reader unit to input a fingerprint to be detected;
 - a database unit to record a fingerprint database provided in advance;
 - a fingerprint comparing unit that identifies said input fingerprint input by said fingerprint reader unit by comparing with fingerprints stored in said fingerprint database recorded in said database unit; and
 - a user recording unit that records the fingerprint input by said fingerprint reader unit,
wherein said user recording unit records said input fingerprint only when said
fingerprint comparing unit does not identify said input fingerprint.